REMARKS

Applicants respectfully request reconsideration of the present case in view of the above amendments and the following remarks.

Claim 72 has been added. Claims 59, 60, and 62 have been amended. Claims 59, 60, 62 and 71-72 are currently pending. No new matter has been inserted. Support for the amendment of claims 59-60 can be found in the specification at least at pages 23-24 and 31-33. Support for the amendment of claim 62 can be found in the specification at least at pages 23-24, 31-33, and 41. Support for new claim 72 can be found in Figure 3.

35 U.S.C. § 112

Claim 62 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Applicants respectfully traverse this rejection:

While not conceding the correctness of the Examiner's position, in the interest of advancing prosecution, Applicants have amended claim 62 to obviate this rejection. Applicants respectfully request that this rejection be withdrawn.

Claim 71 was rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

The Examiner alleges that Applicants have no support for a single strain which exhibits the LPS depicted in claim 71. In response, Applicants point out claim 71 is directed to a specific embodiment of the LPS structures depicted in Figure 3. The third structure in Figure 3 titled "II. pylori HP0826 mutant lipopolysaccharides of strains 26695, SS1" identifies that certain components are only present in strain 26695 (corresponding to claim 71) or in strain SS1 (corresponding to new claim 72). Therefore, at least because Applicants clearly show the structure of LPS of claim 71 in Figure 3, Applicants submit the specification reasonably conveys

to one skilled in the art that Applicants had possession of the claimed invention. Applicants respectfully request that this rejection be withdrawn.

Claims 59, 60, 62 and 71 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully traverse this rejection.

While not conceding the correctness of the Examiner's position, in the interest of advancing prosecution. Applicants have amended claims 59, 60, and 62 in order to obviate this rejection. Specifically, Applicants point out that claims 59, 60, 62, and 71 are directed to a mutant strain of *H. pylori* having deactivated at least one gene encoding a galactosyltransferase. Applicants now submit the specification reasonably conveys to one skilled in the art that Applicants had possession of the full scope of the claimed invention. Applicants respectfully request that this rejection be withdrawn.

Claims 59 and 60 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully traverse this rejection.

While not conceding the correctness of the Examiner's position, in the interest of advancing prosecution, Applicants have amended claims 59 and 60 in order to obviate this rejection. Specifically, Applicants point out that claims 59 and 60 are now directed to a mutant strain of *H. pylori* having deactivated at least one gene encoding a galactosyltransferase. Therefore, Applicants submit that the scope of the claims is fully enabled by the disclosure. Applicants respectfully request that this rejection be withdrawn.

35 U.S.C. § 102

Claims 59 and 60 were rejected under 35 U.S.C. § 102(a) as anticipated by Appelmelk et al. Applicants respectfully traverse this rejection.

Appelmelk et al. discloses <u>fucosyltransferase</u> mutants. However, claim 59 requires a mutant strain of *H. pylori* having deactivated at least one gene encoding a <u>galactosyltransferase</u>. Accordingly, Appelmelk does not disclose or suggest the invention of claim 59. As claim 60 is dependent on claim 59, it is also not anticipated or suggested. Applicants respectfully request that this rejection be withdrawn.

Claims 59 and 60 were rejected under 35 U.S.C. § 102(b) as anticipated by Wang et al. Applicants respectfully traverse this rejection.

Wang et al. discloses <u>fucosyltransferase</u> mutants. However, claim 59 requires a mutant strain of *H. pylori* having deactivated at least one gene encoding a <u>galactosyltransferase</u>. Accordingly, Wang does not disclose or suggest the invention of claim 59. As claim 60 is dependent on claim 59, it is also not anticipated or suggested. Applicants respectfully request that this rejection be withdrawn.

Summary

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

5/23/05 Date

Mark E. Deffner Reg. No. 55,103

Merchant & Gould P.C.

P. O. Box 2903

Minneapolis, MN 55402-0903

(612) 332-5300

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